

Meeting of the CCSP Unified Synthesis Product Development
Committee on "Climate Change and the United States: Analysis of the
Effects and Projections for the Future"
O'Hare Airport Hilton, Chicago, Illinois
May 19-20, 2008

Dr. Christopher Miller, Designated Federal Officer of the National Oceanic and Atmospheric Administration (NOAA) Climate Change Science Program (CCSP) Unified Synthesis Product Development Committee called this second FACA meeting to order at 8:20 am and described the rules of a FACA meeting. The meeting proceeded in accordance with the published agenda (http://www.cpo.noaa.gov/index.jsp?pg=../ccsp/33_meetings.jsp).

Public Comment

There was no request from the public to make an oral comment or statement during the official public comment period.

Discussion

The purpose of the meeting was to follow up on progress made since the first meeting of the group, identify and fill gaps, solidify connections between parts of the report, and prepare for the issuance of the first draft of the report for review in July.

Tom Karl reviewed the citation policy for the 21 CCSP Synthesis & Assessment Products (SAPs), i.e., if the SAP is not yet published, then we can cite the material that is cited in the SAP. Data sets issued by the government for other purposes can be cited (e.g., Census reports, Energy reports). Papers that are expected to be published can be referenced. A criterion for using updated data or analyses, or new displays of existing data, is whether the original data can be traced to a peer-reviewed paper and are generally available.

There was group discussion of the proposed list of external reviewers with some suggestions for additional topical areas to be covered.

Jerry Melillo identified areas where more writing was needed: the Pathways section; adaptation ideas for each section; identification of areas where Katharine Hayhoe's work could be used further (in this regard graphics requests should be sent to Katharine and to Sara Veasey).

John Stone noted: (1) there are many ways to frame the increase and breadth of climate change; (2) use the report to mention adaptation to promote interest in this area; (3) impacts suggest that there is greater urgency now.

Jerry Melillo added that there are limits on adaptation, particularly for groups at the lower end of the economic spectrum (e.g., New Orleans during Hurricane Katrina). He also noted that care would have to be taken with the word "impacts" when trying to express negative and positive outcomes associated with climate change. Impacts are generally negative. Positive outcomes could be expressed as benefits or opportunities.

Ben Santer made the point that we need to do better on model evaluation, i.e., a selection process for appropriate models, and that we need to explore the connection between the fidelity of a model for the past and its reliability for the future. Large uncertainties in future projections dictate that we do more science to better bound the problem. Tony Janetos felt that even more importantly was setting the science foundation for better decision-making.

Don Wuebbles noted that there is a lot of awareness of historical variability in lake levels and an observed one inch decrease has large impacts on ships. Also, a decrease in lake ice leads to increased evaporation.

Michael Wehner will look at precipitation in the Southeast. In this region the heat index is also important (T. Karl).

In the Northwest there is now a box for each sector that addresses adaptation.

SAP 5.3 will be consulted for adaptation examples at the local scale. However, it was stressed that we should not over-sell adaptation; also, there are numerous connections between mitigation and adaptation, e.g., between air conditioning and fossil fuels; between reduction in fossil fuel burning and reduction in respiratory deaths. Evan Mills has prepared a mitigation/adaptation co-benefits paper.

The concept of "capacity to adapt" relates to government and other entities at all scales. The gap between capacity and practice is an adaptation gap. Concrete examples will help elucidate the theory, e.g., various adaptation guidebooks.

The UK CIP (Climate Impacts Program) provides an example of what other countries are doing on risk assessment/adaptation. Using the best probabilistic estimates of climate change and a combination of historical and future emulators to fill in gaps, they are addressing concrete design challenges, e.g., the height of the Thames River storm surge barrier.

With the recognition that tourism is an important industry, the Pathways section will reflect that climate change is part-and-parcel of sustainability/development/tourism (eco-tourism).

The team will work on examples (stories) of complex interactions and unintended consequences like heat wave/drought/air quality; pine bark beetle/fire; biofuels. There are many examples to draw from (sea level rise /hurricanes (e.g., Hurricane Ivan in Chesapeake Bay); coral bleaching/ocean acidification). There is also the risk of something occurring in the future that is entirely unexpected.

SAP 4.3 (ecosystems) has an entire section on monitoring requirements. Thresholds are identified, as well as impacts on ecosystems that are unexpected, severe, and fast.

There was a general concern that the richness of the data that we have is not finding its way into decision-support tools. The Clean Air Act was used as an example of a gap existing between the scientists and the transportation world. There needs to be institution-building to facilitate information transfer on a routine basis (M. Savonis).

Tom Peterson mentioned that there would be a substantial change to the Pathways section, including the depiction of a chain of decision-making activities/milestones.

One important impact for the Caribbean area was mentioned: the likelihood of reduced rainfall.

John Stone noted that the key findings of the report could incorporate these points: there are limits to adaptation; adaptation research is lacking; some changes of the climate system are accelerating.

Mitigation measures will determine to what degree we can adapt (J. Melillo).

Society will not be adapting to conditions that are stationary and this will be a major challenge.

It was suggested that the report be sent out to the SAP chairs, co-chairs for review.

Meeting Decisions and Actions

An Executive Summary and Concluding Thoughts still need to be written.

The sequence of remaining tasks/milestones for this project were discussed and decided. The calendar for the remaining work is:

By July 11 the first-order draft will be available to the author team for final review before external review. The author team suggestions for changes will be due by July 14.

The next draft (one draft beyond the zero-order draft) will be ready for external review (both a Blue Ribbon mail review and a public review) on July 17. [Note: agencies need to be informed that this is their opportunity to submit comments – not later when it is time for the report to go for NSTC review]

The review period will end on August 14.

The next meeting is scheduled for August 21-22 at the Woods Hole Oceanographic Institution in Woods Hole, Massachusetts. The purpose of this meeting will be to formulate responses to the review comments.

Attendance List

Dave Anderson (NOAA)
Virginia Burkett (USGS) - via phone
Jerry Hatfield (USDA)
Tom Karl (NOAA)
Jay Lawrimore (NOAA) – via phone
Dave McGuire (USGS)
Tom Peterson (NOAA)
Roger Pulwarty (NOAA)
Eileen Shea (NOAA)
Michael Savonis (DOT)
Don Boesch (Univ. of Maryland)
Stewart Cohen (Environment Canada)
Jerry Hatfield (USDA)
Katharine Hayhoe (Texas Tech)
Tony Janetos (PNNL)

Jack Kaye (NASA)
Jim McCarthy (Harvard)
Chad McNutt (NOAA – Office of the Under Secretary)
Jerry Melillo (Marine Biological Laboratory)
Evan Mills (LBNL)
Jonathan Patz (Univ. of Wisconsin) - via phone
Ben Santer (LLNL)
Michael Wehner (LBNL)
Thomas Wilbanks (Oak Ridge Nat. Lab)
Don Wuebbles (Univ. of Ill)
Brad Udall (Univ. of Colorado)
John Stone (Carleton University)
Gerry Schwartz (Independent Scholar)
Lynne Carter (Adaptation Network)
Jonathan Overpeck (Univ. of Arizona)
John Walsh (University of Alaska – Fairbanks) – via phone
Nancy Grimm (Arizona State University)
Chris Miller (NOAA)
Bill Murray (STG)
Sara Veasey (NOAA)
Anne Waple (STG)
Susan Hassol (Climate Communication)
Marlene Kaplan (NOAA)
Jolene McGill (NOAA)
Brian Jackson (UCAR)